

## EAST Search History

| Ref # | Hits | Search Query    | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|-----------------|---|------------------|---------|------------------|
| L1    | 589  | (313/498).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/05/23 09:33 |
| L2    | 1596 | (250/205).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/05/23 09:33 |
| L3    | 3365 | (345/87).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/05/23 09:35 |
| L4    | 1025 | (345/102).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/05/23 09:38 |
| L5    | 389  | (315/294).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/05/23 09:41 |
| L6    | 112  | (315/298).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/05/23 10:52 |
| L7    | 106  | (315/299).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/05/23 09:41 |
| L8    | 75   | (315/300).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/05/23 09:41 |

## EAST Search History

|     |      |                 |   |    |     |                  |
|-----|------|-----------------|---|----|-----|------------------|
| L9  | 77   | (315/301).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 09:41 |
| L11 | 2211 | (315/307).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 09:43 |
| L12 | 543  | (315/158).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 10:51 |
| L13 | 666  | (315/151).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 12:28 |
| L14 | 759  | (315/149).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 09:48 |
| L15 | 174  | (315/152).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 09:48 |
| L16 | 165  | (315/153).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 09:48 |
| L18 | 254  | (315/155).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 09:58 |

## EAST Search History

|     |      |  |   |    |    |                  |
|-----|------|--|---|----|----|------------------|
| L19 | 5867 | 315/291-311.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/23 09:58 |
| L20 | 2500 | 315/149-159.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/23 09:58 |
| L21 | 321  | L19 and L20  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/23 09:58 |
| L24 | 99   | L21 and (LED (light near emit\$4 near diode)) and (photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/23 10:54 |
| L25 | 47   | L21 and (LED (light near emit\$4 near diode)) and ((photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (ambient background external room)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/23 10:56 |
| L26 | 80   | L21 and (LED (light near emit\$4 near diode)) and (photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) and (current same (control adjust\$4))    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/23 10:09 |
| L27 | 65   | L21 and (LED (light near emit\$4 near diode)) and (photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) and (current with (control adjust\$4))    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/23 10:10 |

## EAST Search History

|     |      |  |   |    |     |                  |
|-----|------|--|---|----|-----|------------------|
| L28 | 41   | L21 and (LED (light near emit\$4 near diode)) and (photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (current with (control adjust\$4)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2006/05/23 10:55 |
| L29 | 510  | (315/156).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 10:51 |
| L30 | 300  | (315/297).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 10:53 |
| L31 | 602  | (315/312).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 10:53 |
| L32 | 973  | (315/323).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 10:53 |
| L33 | 6000 | (L1 L2 L13 L15 L16 L29 L12 L30 L11 L31 L32)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2006/05/23 10:53 |
| L34 | 873  | L33 and (LED (light near emit\$4 near diode)) and (photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2006/05/23 12:27 |

## EAST Search History

|     |     |  |   |    |     |                  |
|-----|-----|--|---|----|-----|------------------|
| L35 | 284 | L33 and (LED (light near emit\$4 near diode)) and (photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (current with (control adjust\$4))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2006/05/23 10:56 |
| L36 | 354 | L33 and (LED (light near emit\$4 near diode)) and ((photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (ambient background external room))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2006/05/23 10:56 |
| L37 | 57  | L33 and (LED (light near emit\$4 near diode)) and ((photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (current with (control adjust\$4)) same (ambient background external room)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2006/05/23 10:57 |
| L38 | 379 | (315/150).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/05/23 12:28 |
| L39 | 718 | (L2 L38 L16 L12 L30 L11) and (LED (light near emit\$4 near diode)) and (photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2006/05/23 12:33 |
| L40 | 255 | (L2 L38 L16 L12 L30 L11) and (LED (light near emit\$4 near diode)) and (photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (current with (control adjust\$4))                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2006/05/23 12:32 |

## EAST Search History

|     |     |   |   |    |    |                  |
|-----|-----|---|---|----|----|------------------|
| L41 | 298 | (L2 L38 L16 L12 L30 L11) and (LED (light near emit\$4 near diode)) and ((photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (ambient background external room))   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/23 12:33 |
| L42 | 52  | (L2 L38 L16 L12 L30 L11) and (LED (light near emit\$4 near diode)) and ((photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (current with (control adjust\$4)) same (ambient background external room)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/23 12:56 |
| L47 | 14  | (US-20030214242-\$ or US-20030025065-\$ or US-20020175641-\$).did. or (US-6373568-\$ or US-6127783-\$ or US-5471052-\$ or US-3760174-\$ or US-6741351-\$ or US-4810937-\$ or US-6043893-\$ or US-6157453-\$ or US-6081073-\$ or US-6069676-\$ or US-6952002-\$).did.  | US-PGPUB; USPAT                             | OR | ON | 2006/05/23 12:56 |
| L48 | 5   | (L47) and (LED (light near emit\$4 near diode)) and ((photo\$1diode photo\$1transistor photo\$1resistor detector light\$1detector photo\$1detector light\$1receiver light\$1sensor photo\$1sensor sensor) same (current with (control adjust\$4)) same (ambient background external room))                    | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/23 12:57 |